

REMARKS / ARGUMENTS

Claims 57 – 67 and 69 - 92 have been cancelled in the present action without prejudice and may be reasserted in this or a related application.

Claims 42, 47 and 68 have been amended.

Claims 42 and 47 have been amended by describing the nitroguanidine insecticide as dinotefuran and the other insecticide as a biological/fermentation product insecticide. Claim 42 is further amended by describing the combined amount of the dinotefuran and the biological/fermentation product insecticide as being from about 0.01% to about 1% based on the weight of the seed. And claims 42 and 47 are amended by describing the weight ratio of the dinotefuran to the biological/fermentation product insecticide as being from 1:100 to 100:1. Support for dinotefuran as the nitroguanidine is found at least in original claim 57, which has been cancelled. Support for the amount of the insecticide combination is found in the original specification at least at paragraph [00056] and support for the weight ratio of the dinotefuran to the biological/fermentation product insecticide is found at least at paragraph [00057].

Claim 68 has been amended so that the language corresponds to the claim from which it depends.

New claims 93 – 103 have been added. Support for the subject matter in the new claims is found in the original specification at least at paragraphs [00056], where the amount of the combined insecticides is described, and [00057], where the weight ratios of dinotefuran to the biological/fermentation product insecticide are described.

Claims 42 – 47, 68 and 93 – 103 are in the case.

No new matter has been added.

Rejection of claims 42 – 47, 57, 68 75 and 86 under 35 USC §103(a) as obvious over U.S. Patent No. 6,875,727 to Hofer *et al.*

The rejection of claims 42 – 47, 57, 68 75 and 86 under 35 USC §103(a) as obvious over U.S. Patent No. 6,875,727 to Hofer *et al.* ("Hofer") is respectfully traversed and it is requested that the rejection be reconsidered in view of the amendments to the claims and the reasons discussed below and be withdrawn.

As the Office argues, Hofer teaches a method of controlling pests by applying a composition comprising a macrolide (abamectin or spinosad) to plants or their

propagation material (seeds). The macrolide can be applied in combination with another active such as MTI-446 (dinotefuran).

Claim 42 has been amended to describe a method for protecting a seed and/or shoots and foliage of a plant by treating the unsown seed with a composition comprising dinotefuran and a biological/fermentation product insecticide wherein the combined amount of the dinotefuran and the biological/fermentation product insecticide is from about 0.01% to about 1% based on the weight of the seed and the weight ratio of the dinotefuran to the biological/fermentation product insecticide is from 1:100 to 100:1.

Claim 47 has been amended to describe a composition for seed treatment prior to sowing comprising dinotefuran and a biological/fermentation product insecticide, wherein the weight ratio of the dinotefuran to the biological/fermentation product insecticide is from 1:100 to 100:1.

The presently claimed invention is novel and nonobvious over the Hofer patent because Hofer does not teach the rate of application of a combination of dinotefuran and a biological/fermentation product insecticide to seed; it does not teach or suggest that those actives must be in a certain weight ratio to each other; and it does not teach or suggest that the weight ratio of dinotefuran to the biological/fermentation product insecticide has any effect at all on the efficacy of treatment. Without guidance that the ratio of these particular actives is a results-effective parameter, a skilled practitioner would have no motivation to vary the ratio of one insecticide to the other or to seek an optimum ratio. Without this motivation, the Hofer reference cannot support a *prima facie* case of obviousness under 35 USC §103(a). Accordingly, it is respectfully requested that the present ground of rejection be reconsidered and be withdrawn.

Rejection of claims 42 – 47, 57, 68, 75 and 86 under 35 USC §103(a) as obvious over U.S. Patent Publication 2003050326 to Lee *et al.*

The rejection of claims 42 – 47, 57, 68, 75 and 86 under 35 USC §103(a) as obvious over U.S. Patent Publication 2003050326 to Lee *et al.* ("Lee") is respectfully traversed and it is requested that the rejection be reconsidered in view of the amendments to the claims and the reasons discussed below and be withdrawn.

Claims 42 and 47 have been amended as discussed above.

The invention described in the amended claims is novel and nonobvious over the

Lee publication because Lee does not teach a treatment comprising a combination of dinotefuran and a biological/fermentation product insecticide; it does not teach or suggest the rate of application of a combination of dinotefuran and a biological/fermentation product insecticide to seed; it does not teach or suggest that those actives must be in a certain weight ratio to each other; and it does not teach or suggest that the weight ratio of dinotefuran to the biological/fermentation product insecticide has any effect on the efficacy of treatment. Without guidance that the rate of use and the ratio of these particular actives are results-effective parameters, a skilled practitioner would have no motivation to vary the amount of or the ratio of one insecticide to the other or to seek an optimum ratio. Without this motivation, the Lee reference cannot support a *prima facie* case of obviousness under 35 USC §103(a). Accordingly, it is respectfully requested that the present ground of rejection be reconsidered and be withdrawn.

Nonstatutory obviousness-type double patenting rejection of claims 42 – 47, 57 and 68 over claims 1 and 27 of U.S. Patent No. 6,586,365 in view of U.S. Patent Publication No. 2003050326 to Lee *et al.*

The nonstatutory obviousness-type double patenting rejection of claims 42 – 47, 57 and 68 over claims 1 and 27 of U.S. Patent No. 6,586,365 in view of U.S. Patent Publication No. 2003050326 to Lee *et al.* ("Lee") is respectfully traversed and it is requested that the rejection be reconsidered in view of the amendments to the claims and the reasons discussed below and be withdrawn.

Neither claims 1 and 27 of U.S. Patent No. 6,586,365, nor the Lee publication teach seed treatment with a combination of dinotefuran and a biological/fermentation product insecticide and neither suggests that the two insecticides are used in a combined amount between about 0.01% and 1% based on seed weight and where the ratio of the dinotefuran to the biological/fermentation product insecticide is between 100:1 and 1:100. Without these teachings or suggestions, the combination of claims 1 and 27 of the '365 patent in view of Lee cannot make the present claims obvious.

Claim 1 of the '365 patent is drawn to a method of protecting transgenic corn by treating the corn seed with clothianidin in an amount which in combination with the transgenic event is effective to protect the corn seed to a degree greater than would be

expected due to either the clothianidin or the transgenic event alone. Claim 27 is drawn to a seed having such a treatment. Claims 1 and 27 do not mention a combination of clothianidin (much less dinotefuran) with another insecticide; they do not mention an amount of insecticide that should be used; they do not mention that the nitroguanidine (clothianidin) is to be used in a certain ratio with the other insecticide, all of which features are included in the presently claimed invention. Furthermore, they do not suggest that the ratio between two insecticides has an effect on the efficacy of the treatment.

Moreover, the Lee patent fails to add a teaching or to provide any guidance whatsoever as to the amounts of the combination of dinotefuran and a biological/fermentation product insecticide; the ratio of the two; or the fact that the ratio is a results-effective variable. Without these teachings and suggestions, the skilled practitioner would have no motivation to modify the claims of the '365 patent in a manner that would make obvious the presently claimed invention.

Accordingly, it is respectfully requested that the present ground of rejection be reconsidered and withdrawn.

Nonstatutory obviousness-type double patenting rejection of claims 42 – 47, 57, 68, 75 and 86 over claims 1 – 4, 9, 10, 19, 26, 28 – 36, 39 – 41, 48 and 49 of U.S. Patent No. 6,660,690 in view of U.S. Patent Publication No. 2003050326 to Lee *et al.*

The nonstatutory obviousness-type double patenting rejection of claims 42 – 47, 57, 68, 75 and 86 over claims 1 – 4, 9, 10, 19, 26, 28 – 36, 39 – 41, 48 and 49 of U.S. Patent No. 6,660,690 in view of U.S. Patent Publication No. 2003050326 to Lee *et al.* ("Lee") is respectfully traversed and it is requested that the rejection be reconsidered in view of the amendments to the claims and the reasons discussed below and be withdrawn.

Neither claims 1 – 4, 9, 10, 19, 26, 28 – 36, 39 – 41, 48 and 49 of U.S. Patent No. 6,660,690 (the "'690" patent), nor the Lee publication teach seed treatment with a combination of dinotefuran and a biological/fermentation product insecticide and neither suggests that the two insecticides are used in a combined amount between about 0.01% and 1% based on seed weight and where the ratio of the dinotefuran to the biological/fermentation product insecticide is between 100:1 and 1:100. Without these

teachings or suggestions, the combination of claims 1 – 4, 9, 10, 19, 26, 28 – 36, 39 – 41, 48 and 49 of the '690 patent in view of Lee cannot make the present claims obvious.

In particular, claim 1 of the '690 patent is drawn to a method of protecting a seed and/or shoots and foliage of a plant grown from the seed by treating the unsown seed with a composition consisting essentially of a pyrethrin or pyrethroid and an insecticide selected from a group of insecticides which includes nitroguanidine insecticides, one of which can be nidinotefuran (dinotefuran), or it can be a biological/fermentation product that is selected from avermectin or spinosad. However, the combination does not teach a combination of a nitroguanidine insecticide with a biological/fermentation product insecticide. Claim 32 is drawn to a seed having such a treatment. Claim 39 is drawn to a composition for seed treatment that comprises the components described in claim 1. Claim 41 is similar to claim 1, but includes the feature that the seed is a transgenic seed.

None of the cited claims describe a combination of dinotefuran with a biological/fermentation product insecticide. Nor do they mention an amount of insecticide that should be used, or that the dinotefuran is to be used in a certain ratio with the biological/fermentation product insecticide. All of which features are included in the presently claimed invention. And they do not suggest that the ratio between two insecticides has an effect on the efficacy of the treatment.

Moreover, as discussed earlier, the Lee patent fails to add a teaching or to provide any guidance whatsoever as to the amounts of the combination of dinotefuran and a biological/fermentation product insecticide; the ratio of the two; or the fact that the ratio is a results-effective variable. Without these teachings and suggestions, the skilled practitioner would have no motivation to modify the claims of the '690 patent in a manner that would make obvious the presently claimed invention.

Accordingly, it is respectfully requested that the present ground of rejection be reconsidered and withdrawn.

Provisional nonstatutory obviousness-type double patenting rejection of claims 42 – 47, 57, 68, 75 and 86 over claims 1, 24 and 28 of copending U.S. Patent Application No. 09/968,174 in view of U.S. Patent Publication No. 2003050326 to Lee *et al.*

The reconsideration and withdrawal of the rejection of claims 42 – 47, 57, 68, 75 and 86 over claims 1, 24 and 28 of copending U.S. Patent Application No. 09/968,174 in view of U.S. Patent Publication No. 2003050326 to Lee *et al.* is respectfully requested for the following reasons.

Applicants respectfully call the Office's attention to MPEP §804, I., B., which states:

The "provisional" double patenting rejection should continue to be made by the examiner in each application as long as there are conflicting claims in more than one application unless that "provisional" double patent rejection is the only rejection remaining in at least one of the applications.

If a "provisional" nonstatutory obviousness-type double patenting (ODP) rejection is the only rejection remaining in the earlier filed of the two pending applications, while the later-filed application is rejectable on other grounds, the examiner should withdraw that rejection and permit the earlier-filed application to issue as a patent . . . (Emphasis added)

Inasmuch as this double patenting rejection is the only rejection remaining in the present application after the withdrawal of the rejections discussed above, Applicants submit that this rejection should be withdrawn, consistent with the clear language of the MPEP.

Finalization of restriction requirement and filing of Terminal Disclaimer to overcome obviousness-type double patenting rejection over U.S. Patent No. 6,593,273:

The Applicant acknowledges the making final the restriction to the election of species

It is noted that the Office has acknowledged Applicant's willingness to file a Terminal Disclaimer to overcome a nonstatutory obviousness-type double patenting rejection of claims 42 – 47, 57, 68, 75 and 86 over claims 1, 2, 20, 21, 28 and 42 of U.S. Patent No. 6,593,273 to Asrar *et al.* that had been asserted in the Office Action of July 14, 2006. With respect, the Applicant has not signified a willingness to file a Terminal Disclaimer, but rather, requested that action to overcome this ground of rejection be held in abeyance until patentable subject matter has been identified.

Applicant now traverses this ground of rejection and respectfully requests that the rejection be reconsidered in view of the amendments to the claims and the reasons discussed below and be withdrawn.

None of claims 1, 2, 20, 21, 28 and 42 of U.S. Patent No. 6,593,273 teach seed treatment with a combination of dinotefuran and a biological/fermentation product insecticide, or suggest that the two insecticides are used in a combined amount between about 0.01% and 1% based on seed weight and where the ratio of the dinotefuran to the biological/fermentation product insecticide is between 100:1 and 1:100. Without these teachings or suggestions, claims 1, 2, 20, 21, 28 and 42 of U.S. Patent No. 6,593,273 cannot make the present claims obvious.

Claim 1 of the '273 patent is drawn to a method of protecting transgenic corn by treating the corn seed with a pesticide other than clothianidin or thiamethoxam in an amount which in combination with the transgenic event is effective to protect the corn seed to a degree greater than would be expected due to either the pesticide or the transgenic event alone. Claim 42 is drawn to a seed having such a treatment. Claims 1 and 42 do not mention a combination of dinotefuran with another insecticide; they do not mention an amount of insecticide that should be used; they do not mention that the dinotefuran is to be used in a certain ratio with the other insecticide, all of which features are included in the presently claimed invention. Furthermore, they do not suggest that the ratio between two insecticides has an effect on the efficacy of the treatment.

Without these teachings and suggestions, the skilled practitioner would have no motivation to modify the claims of the '273 patent in a manner that would make obvious the presently claimed invention. Accordingly, it is respectfully requested that the present ground of rejection be reconsidered and withdrawn.

Request for reconsideration:

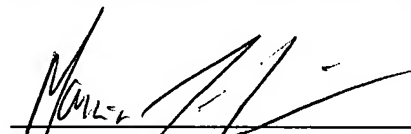
It is respectfully requested that the claims be re-examined in view of the amendments and the remarks/ arguments that are discussed above and be found to be allowable. If one or all of the claims are deemed to not be allowable, the Examiner is invited to call the undersigned attorney at the number given below for resolution of any remaining issues.

Respectfully submitted,

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Date



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